

**Second Note to the Technical Teams
SMA Contract with Dr. Yilmaz Sahinkaya
August 11, 1999**

This note will serve as a reminder of the upcoming meetings during the week of August 16 with Dr. Yilmaz Sahinkaya and will also give some additional direction as the project comes into focus.

The primary focus of this SOW relates to analysis of electrical systems for 42/14 volt vehicles. Thus, this work will not comprehend certain components and architectures related to hybrid vehicles. Rather, the assumption is a relatively traditional vehicle with a single or dual voltage electrical architecture. The only exception at this point is the discussion and modeling of IC engines with electric valve control.

There has been discussion on how to focus the work of this contract to maximize the impact here at Energenix. It will be useful to validate the analyses against a real vehicle. In the present environment, the only choice is the Renault Scenic. Thus, the power generation / modification / storage components and any 42 volt components will be focused on the components already in the Scenic (or planned for implementation as the list of 42 volt loads increases). This should not be limiting, as the models will be both generic and also characterized to a specific component.

The meeting schedules are as follows:

Kickoff Meeting	Monday, August 16, 8:30 AM, Conf Room 3D
Overall Computational Chassis	Monday, August 16, 10:30 AM, Conf Room 3D
Trip to Anderson to see Gebamo in action and talk with generator team	Monday, August 16 afternoon, Jim Moore's work area and room 18-313
3 Phase AC generator	Tuesday, August 17, 8 AM, Conf. Room 3E
AC to DC Rectifier	Tuesday, August 17, 10 AM, Conf. Room 3E
DC to DC Converters	Tuesday, August 17, 1 PM, Conf. Room 3E
Rechargeable battery	Tuesday, August 17, 3 PM, Conf. Room 3E
IC Engine with Electric Valve Control	Wednesday, August 18, 8 AM, Conf Room 2E
DC to AC Inverters	Wednesday, August 18, 10 AM., Conf. Room 2E
Wrap-up Meeting	Wednesday, August 18, 1 PM, Conf. Room 2E

Late Wednesday afternoon as well as potentially some time on Thursday will be available for further meetings with Yilmaz.

As a reminder, the composition of the teams is:

Overall Computational Chassis/GUI

	Conover, Husted, Simopoulos, Wood, Moore, MacBain
Rechargeable battery	Waters, Kruger, Barnhardt, Hanauer, and Kwok
3 Phase AC generator	Raja, Krefta, Khan, Fattic, and Moore
AC to DC Rectifier	Ely, Barrett, and Sriram
DC to DC Converters	Barrett, Sriram, Maple, and Kurnia
DC to AC Inverters	Raja, Sriram, Kurnia, and Hayes
IC Engine with Electric Valve Cont.	Ely and further team to be selected

John MacBain